

Title (en)

CAM DRIVEN INTERNAL COMBUSTION ENGINE WITH TOOTHED ROLLER ARRAYS

Title (de)

NOCKENGETRIEBENER VERBRENNUNGSMOTOR MIT ZAHN WALZENGRUPPEN

Title (fr)

MOTEUR À COMBUSTION INTERNE ENTRAÎNÉ PAR CAMES DOTÉ D'ENSEMBLES ROULEAUX DENTÉS

Publication

EP 3117084 A4 20171011 (EN)

Application

EP 14882225 A 20140214

Priority

CA 2014050106 W 20140214

Abstract (en)

[origin: WO2015120530A1] An internal combustion engine featuring a radial array of cylinders and pistons; the pistons having rods including cam followers engaging the surface of a cam drive to transfer reciprocating linear motion into rotary motion; wherein between the piston rods and the engine housing are disposed arrays of toothed rollers to provide a rolling interface.

IPC 8 full level

F02B 75/00 (2006.01); **F01B 1/06** (2006.01); **F02B 57/08** (2006.01); **F02B 75/22** (2006.01); **F16C 29/04** (2006.01); **F16C 33/30** (2006.01)

CPC (source: EP US)

F01B 1/062 (2013.01 - EP); **F01B 1/0668** (2013.01 - EP US); **F01B 9/06** (2013.01 - EP US); **F02B 57/08** (2013.01 - EP); **F02B 75/02** (2013.01 - US); **F02B 75/222** (2013.01 - EP US); **F02B 75/24** (2013.01 - US); **F16C 29/04** (2013.01 - EP US); **F16C 33/306** (2013.01 - EP US); **F23R 3/286** (2013.01 - US); **F01B 2009/068** (2013.01 - EP); **F02B 2075/028** (2013.01 - US); **F02B 2275/36** (2013.01 - EP); **Y02T 10/12** (2013.01 - EP)

Citation (search report)

- [X] US 6601551 B1 20030805 - RABHI VIANNEY [FR]
- [X] WO 2005067508 A2 20050728 - HIGGINS DARRELL GRAYSON [US]
- [X] US 1863877 A 19320621 - LEE RIGHTENOUR ASA
- [X] US 4387672 A 19830614 - CROCKER ALFRED J [US]
- See references of WO 2015120530A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2015120530 A1 20150820; CA 2976644 A1 20150820; CA 2976644 C 20230314; CN 106414950 A 20170215; EP 3117084 A1 20170118; EP 3117084 A4 20171011; JP 2017507284 A 20170316; JP 6574447 B2 20190911; US 2021317780 A1 20211014

DOCDB simple family (application)

CA 2014050106 W 20140214; CA 2976644 A 20140214; CN 201480077186 A 20140214; EP 14882225 A 20140214; JP 2016568983 A 20140214; US 201415118484 A 20140214